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## Patent Abstracts of Japan

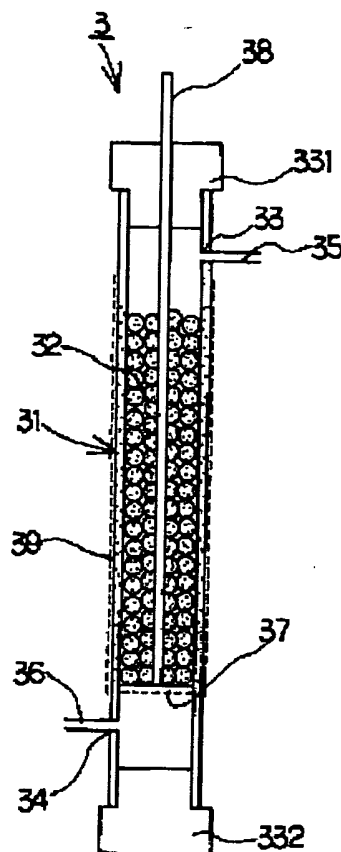
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TITLE : METHOD OF DESORPTION AND  
 REGENERATION BY NON-THERMAL  
 PLASMA AND DEVICE THEREFOR



ABSTRACT : PROBLEM TO BE SOLVED: To effectively perform desorption of waste gas adsorbed on adsorbents to lower running cost in a waste gas treating method in which waste gas is adsorbed on the adsorbents by applying non-thermal plasma to the adsorbents on which the waste gas is adsorbed.

SOLUTION: A reactor 3 which is a device for realizing waste gas treatment has adsorbents 32 of gamma alumina pellets housed in a reactor body 31 which is a closed vessel. In the center of the inside of the reactor body 31, a wire-shaped central electrode 38 is installed, and on the outer periphery of the reactor body 31, a plasma electrode constituted of a mesh screen-shaped outer electrode 39 is fixed. By applying an AC current of voltage and frequency set at prescribed values to the central electrode 38, non-thermal plasma is generated at ordinary temperature and pressure. By thus generating the non-thermal plasma between the adsorbents 32, the waste gas adsorbed on the adsorbents 32 is desorbed, and by desorbing the waste gas from the adsorbents 32, the adsorbents 32 are regenerated.

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